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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/088,634	10/16/2002	Pal Maliga	RUT.00-0038US	7235	
110	7590 02/14/2006		EXAM	EXAMINER	
DANN, DOR 1601 MARKE	RFMAN, HERRELL &	МЕНТА, А	MEHTA, ASHWIN D		
SUITE 2400	I SIRLLI		ART UNIT	PAPER NUMBER	
PHILADELPH	PHILADELPHIA, PA 19103-2307				
			DATE MAIL ED: 02/14/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)		
Examinar Initiated Intension Summans	10/088,634	MALIGA ET AL.		
Examiner-Initiated Interview Summary	Examiner	Art Unit		
	Ashwin Mehta	1638		
All Participants:	Status of Application: <u>allo</u> <u>interference</u>	owable, suspended pending		
(1) <u>Ashwin Mehta</u> .	(3)			
(2) <u>Dr. Kathleen Rigaut</u> .	(4)			
Date of Interview: 20 December 2006	Time:			
Type of Interview: ☐ Telephonic ☐ Video Conference ☐ Personal (Copy given to: ☐ Applicant ☐ Applic Exhibit Shown or Demonstrated: ☐ Yes ☐ No If Yes, provide a brief description: .	ant's representative)	·		
Part I.				
Rejection(s) discussed: None				
Claims discussed: 12, 14				
Prior art documents discussed: None				
Part II.				
SUBSTANCE OF INTERVIEW DESCRIBING THE GENE Examiner's amendments to the claims and abstract were discussed.		S DISCUSSED:		
Part III.				
 It is not necessary for applicant to provide a separate record of the substance of the interview, since the interview directly resulted in the allowarder of the application. The examiner will provide a written summary of the substance of the interview in the Notice of Allowability € x wince 's Amendment'. It is not necessary for applicant to provide a separate record of the substance of the interview, since the interview did not result in resolution of all issues. A brief summary by the examiner appears in Part II above. 				
ASA				
(Examiner/SPE Signature) (Applican	t/Applicant's Representative Si	gnature - if appropriate)		

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Objections and Rejections

1. The objections to the specification are withdrawn in light of the amendments.

2. The rejections of claims 1-22 under 35 U.S.C. 112, 1st and 2nd paragraphs are withdrawn in light of the amendments submitted in the paper filed September 28, 2005 and below.

Examiner's Amendment

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Dr. Kathleen Rigaut on December 21, 2005.

The application has been amended as follows:

In the claims,

- 12. A site specific recombination method for removal of predetermined nucleic acid sequences from <u>a</u> [the] plastid genome, said method comprising:
- a) providing a first nucleic acid construct, said construct comprising a regulated promoter being operably linked to a nucleic acid encoding a plastid targeting transit sequence which is operably linked to a nucleic acid encoding a site specific recombinase having excision activity,

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said construct optionally further comprising a first selectable marker encoding nucleic acid

having plant specific 5' and 3' regulatory nucleic acid sequences;

b) providing a second DNA construct, said second construct comprising a [an] second selectable marker encoding nucleic acid, said second construct further comprising flanking plastid targeting nucleic acid sequences which flank a pair of excision sites, the second selectable marker encoding nucleic acid, and a predetermined nucleic acid sequence from a plastid genome, wherein the excision sites flank the second selectable marker encoding nucleic acid and the predetermined nucleic acid sequence, wherein said plant targeting nucleic acid sequences facilitate homologous recombination into said plastid genome [at a plastid genome sequence targeted for deletion] comprising said predetermined sequence targeted for deletion [and excision sites said excision sites flanking both the plastid genome sequence targeted for deletion and the selectable marker nucleic acid];

- c) introducing said second DNA construct into a plant cell <u>and allowing said homologous</u> recombination to occur;
- d) culturing a plant cell of step c) in the presence of a selection agent, thereby selecting for those plant cells expressing the proteins encoded by said second DNA construct;
 - e) regenerating a plant from cells obtained in step d);
- f) introducing said first DNA construct into plant cells from the plant of step e) in the presence of a selection agent and selecting those plant cells expressing proteins encoded by said first construct, which when present said site specific recombinase acts on said excision sites, thereby removing said <u>predetermined nucleic acid sequence</u> [plastid genome sequence targeted for deletion] and said <u>second</u> selectable marker nucleic acid sequence <u>from the plastid genome</u>.

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In claim 14, line 4, the recitation, "proteins" was replaced with --protein-encoding genes-

The abstract was amended as follows:

A site-specific recombination system and methods of use thereof are disclosed for manipulating the <u>plastid</u> genome of higher plants.

4. Pending claims 1-21 are allowable. However, due to a potential interference, *ex parte* prosecution is SUSPENDED for a period of SIX MONTHS. Upon expiration of suspension, applicant should make an inquiry as to the status of the application.

Contact Information

Any inquiry concerning this or earlier communications from the Examiner should be directed to Ashwin Mehta, whose telephone number is 571-272-0803. The Examiner can normally be reached from 8:00 A.M to 5:30 P.M. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Anne Marie Grunberg, can be reached at 571-272-0975. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300. Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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January 20, 2006

Ashwin D. Mehta, Ph.D

Primary Examiner Art Unit 1638

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